

Docket No. AUS9-2000-0311-US1

CLAIMS:

What is claimed is:

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1. A data processing system, comprising:
a plurality of hardware devices;
a plurality of operating systems; and
a firmware component for virtualizing the plurality
10 of hardware devices for interaction with the plurality of
operating systems; wherein
the firmware component is implemented using 64-bits.

2. The data processing system as recited in claim 1,
15 wherein the plurality of hardware devices comprise a
plurality of processors and wherein each of the plurality
of processors operates in a 64-bit mode.

3. The data processing system as recited in claim 1,
20 wherein the firmware component comprises a firmware
kernel and the firmware kernel maintains a list of
address and size pairs that describe cacheable system
memory addresses.

- 25 4. The data processing system as recited in claim 1,
wherein a primitive method checks addresses to determine
whether the address is cacheable or cache-inhibited.

5. The data processing system as recited in claim 4,
30 wherein the primitive method, responsive to a
determination that the address is cacheable, carries out

